

DECODING OF LOW-COMPLEXITY SIGNALS TRANSMITTED BY A CONSTELLATION MODULATION

ABSTRACT

A method decodes a noisy signal from the coordinates of a point in a point constellation, each point associated with a digital data item of a determined number of bits, consisting of determining components of a received point; determining a reference point corresponding to the constellation point closest to the received point; determining at least one
5 concurrent point corresponding to the constellation point closest to the reference point, having a bit of determined rank opposite to the bit of determined rank of the reference data; and determining, at least for the bit of the reference digital data at said determined rank, a precision data item based the received, reference, and concurrent points, in which the determination of the bits of the concurrent point is performed based on the values of some of
10 the bits of the reference digital data and on said rank.